



# Next Generation AI and Emerging Technologies Symposium

8<sup>th</sup> March – 6<sup>th</sup> April 2022

## Program

<b>Tuesday 8 March</b>	<b>Launch: Intro to AI and emerging technologies</b>
2-2.05pm	Welcome Jess Cornock, Manager, Next Gen Graduates Programs, CSIRO's Data61
2.05-2.10pm	Welcome to Country Uncle Allen Madden
2.10-2.55pm	Jon Whittle, Director, CSIRO's Data61 <i>What is AI?</i>
2.55-3pm	<i>Break</i>
3-3.45pm	Sally Cripps, Science Lead, Next Gen Grad Programs, CSIRO's Data61 <i>AI for Science</i>
3.45-3.50pm	<i>Break</i>
3.50-4.30pm	Stela Solar, Director, National AI Centre, CSIRO <i>AI in Industry</i>
4.30-5pm	Panel Q&A
<b>Thursday 17 March</b>	<b>AI and emerging technologies in the real world</b>
9-9.10am	Welcome Gilad Francis, Coursework Lead, Next Gen Graduates Programs
9.10-10am	Mark Girolami, Chief Scientist, The Alan Turing Institute <i>AI with impact</i>
10-10.15am	<i>Break</i>
10.15-11am	Petra Kuhnert, Data Scientist, CSIRO's Data61 <i>Reimagining the environment with MLAI</i>
11-11.45am	Dacheng Tao, Director, UBTECH Sydney Artificial Intelligence Centre <i>Super deep learning for computer vision</i>
11.45am-12pm	<i>Break</i>
12-12.45pm	Liming Zhu, Research Director, Software and Computational Systems, CSIRO's Data 61 <i>Emerging technologies in the real world</i>
12.45-1.30pm	<i>Lunch</i>

1.30-2pm	Michael Kuiper, Team Lead, Molecular & Materials Modelling group, CSIRO's Data61 Damien Watkins, Research Team Lead, Computational Software Engineering and Visualisation Team, CSIRO's Data61 <i>Biomolecular visualization using augmented and virtual reality</i>
2-2.15pm	Thierry Rakotoarivelo, Senior Research Scientist, Information Security and Privacy Group, CSIRO's Data61 Paul Tyler, Data Privacy Team Leader, CSIRO's Data61 <i>Data privacy in the real world</i>
2.15-2.45pm	Jason Potts, Co-director of the Blockchain Innovation Hub, RMIT <i>A new institutional technology for the digital economy</i>
2.45-2.50pm	<i>Break</i>
2.50-3.15pm	Carsten Rudolph, Head of Department for Software Systems and Cybersecurity, Monash University <i>Cybersecurity/Quantum Computing: some research challenges</i>
3.15-3.45pm	Ben Hutchinson, Researcher, Google Centre for Responsible AI <i>Responsible AI in the real world</i>
3.45-4pm	Dan Jermyn, Chief Decision Scientist, Commonwealth Bank <i>Decision science at CBA</i>
4-4.15pm	<i>Break</i>
4.15-6pm	Bushfire Grand Challenge Masterclass with Mahesh Prakash, leader and developer of emergency and disaster management solutions at CSIRO's Data61 <i>Grand challenge introduction: research questions, dataset, tools, and models</i>
<b>Wednesday 23 March Ethics in AI and technologies</b>	
10-10.10am	Welcome Roman Marchant, Coursework Lead, Next Gen Graduates Programs
10.10-10.55am	Toby Walsh, ARC Laureate Fellow and Scientia Professor of AI <i>AI and Ethics: why all the fuss?</i>
10.55-11am	<i>Break</i>
11-11.45am	Emma Schleiger, Research Scientist, Strategic Insights Team, CSIRO's Data61 <i>Core AI ethics principles</i>
11.45am-12pm	<i>Break</i>
12-12.45pm	Kim Weatherall, Co-Chair, AI Ethics Committee, Australian Computer Society <i>Law's relation to responsible and ethical AI</i>
12.45-1.30pm	<i>Lunch</i>
1.30-2.10pm	Seth Lazar, General Co-Chair, ACM Fairness, Accountability and Transparency Conference 2022
2.10-2.55pm	Lachlan McCalman, Chief Practitioner, Gradient Institute <i>A machine learner's introduction to ethical AI</i>
2.55-3pm	<i>Break</i>
3-3.30pm	Cathy Robinson, Principal Research Scientist, CSIRO <i>How Indigenous-designed AI systems can enable collaborative environmental decisions</i>

3.30-4pm	Vincent Zhang, Co-founder and President, Tech for Social Good <i>Tech for Social Good: Young Australians in responsible tech</i>
4-4.15pm	<i>Break</i>
4.15-6pm	Bushfire Grand Challenge Masterclass <i>Moderated debate: Ethical implications of AI for bushfires</i>
<b>Wednesday 30 March</b>	<b>Autonomous systems</b>
10-10.10am	Welcome Meiru Che, Coursework Coordinator, Next Gen Graduates Programs
10.10-10.55am	Peter Corke, Distinguished Professor of Robotic Vision, QUT
10.55-11am	<i>Break</i>
11-11.45am	Stefan Williams, Head of School of Aerospace, Mechanical and Mechatronic Engineering, University of Sydney
11.45am-12pm	<i>Break</i>
12-12.45pm	Hugh Durrant-Whyte, NSW Chief Scientist & Engineer
12.45-1.30pm	<i>Lunch</i>
1.30-2.15pm	Navinda Kottege, Group Leader, Robotics and Autonomous Systems, CSIRO's Data61 <i>Team CSIRO Data61 at the DARPA Subterranean Challenge</i>
2.15-2.35pm	Juxi Leitner, CEO and Co-Founder, LYRO Robotics <i>How to transfer from fundamental research to building fundamentally impactful products</i>
2.35-2.55pm	Stefan Hrabar, CEO and Co-Founder, Emesent <i>Drone autonomy for mapping underground mines</i>
2.55-3pm	<i>Break</i>
3-3.45pm	Fabio Ramos, Principal Research Scientist, NVIDIA USA and Professor of Robotics and Machine Learning, University of Sydney <i>How to train robots in simulation to perform well in the real world</i>
3.45-4pm	<i>Break</i>
4-6pm	Bushfire Grand Challenge Masterclass <i>Create your own autonomous agent to battle bushfires</i>
<b>Wednesday 6 April</b>	<b>Entrepreneurship and innovation in AI &amp; emerging technologies</b>
10-10.10am	Welcome Gilad Francis, Coursework Lead, Next Gen Graduates Programs
10.10-10.55am	Jeremy Howard, Founder, Fast.ai
10.55-11am	<i>Break</i>
11-11.45am	Sally-Ann Williams, CEO, Cicada Innovations
11.45am-12pm	<i>Break</i>
12-12.45pm	Sue Keay, Founder and Chair of Robotics Australia Group
12.45-1.30pm	<i>Lunch</i>
1.30-2.15pm	Denis Bauer, Transformational Bioinformatics Group Leader, CSIRO
2.15-2.20pm	<i>Break</i>
2.20-3.45pm	Ask me with founders – industry panel with Sally-Ann Williams
3.45-4pm	<i>Break</i>

4-6pm

Bushfire Grand Challenge Masterclass

*Commercialisation: how to create a successful product/business to impact society*

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*\*Last updated on 25<sup>th</sup> March 2022. This program is subject to change.*